EVALUATION OF THE DNRC'S TECHNICAL ASSISTANCE PROGRAM FOR WATER PROJECTS (TAP)

Recently, increased emphasis has been placed on in-state water development as a means of protecting Montana's finite water resources from downstream appropriators in other states. The importance of encouraging reasonable water use by Montana's citizens is given creedence by Section 85-1-101.2 of the Montana Code where it is recognized that the "public policy of the State is to promote the conservation, development, and benenficial use of the State's water resources to secure maximum economic and social prosperity for its citizens." The DNRC's Technical Assistance Programs for Water Projects (TAP) will conduct prefeasibility assessments free of charge for local groups interested in developing or managing Montana's water resources. Thus, TAP is one means by which the State attempts to implement the above policy.

The first section of this paper presents a general description of the Technical Assistance Program including its origin, objectives, and policies. Next, proposed water projects evaluated under the Program are examined to illustrate TAP's function and mode of operation. The need for a state-funded technical assistance program for small water projects is assessed by examining other entities offering similar types of assistance. Finally, possible options for the future direction of TAP are identified and discussed.

Background

The program for Technical Assistance to Water Projects (TAP) was established within the Water Resources Division of the Department of Natural Resources and Conservation (DNRC) during fiscal year 1976. TAP was created by a DNRC administrative initiative aimed at encouraging and assisting in the development of locally-sponsored, small-scale, water projects throughout the State of

Montana. The approval of a budget request submitted to the 1976 legislature resulted in the addition of monies to the DNRC's General Fund to be used for TAP. The program's fiscal year 1979 budget expenditure was $31,790.

Program Description and Current Policies

The Technical Assistance Program was created to provide professional advise on preliminary engineering, economic, and legal aspects of almost any locally-sponsored, water project proposal. No fees are assessed groups receiving assistance through TAP. The Program is viewed as a means of assisting small water projects which might not otherwise be carried out due to lack of available technical knowledge, organizational expertise, or financial resources at the local level. A TAP study is not meant to substitute for a full feasibilty or design study. Rather, it provides a means for determining whether to pursue these more detailed and costly aspects of project development.

At present, there are few guidelines on the types of water projects which will be accepted for assistance under TAP. Projects eligible for consideration include, but are not limited to the following:

1. Water Storage Projects for:
    a. irrigation
    b. domestic and municipal use
    c. fish and wildlife
    d. flood control

    e. water quality enchancement
    f. recreation

2. Water Supply Systems for:
    a. irrigation
    b. rural and small communities to satisfy municipal needs
    c. parks
    d. small industrial
3. Small-Scale Hydroelectric Projects
4. Drainage Projects for
    a. saline seep control
    b. high water table reduction
5. Sediment and Erosion Control Projects
6. Water Quality Maintenance and Improvement Projects

Divisions of local government, planning boards, irrigation, drainage, and conservation districts, incorporated ditch and canal companies, cooperatives and virtually any other locally-based group are all eligible to receive TAP assistance. Proposed projects that would benefit only 1 individual are generally _not_ eligible for consideration, however.

The final product of a TAP study is a brief, straight-forward prefeasibility report to the requesting local group. The report generally covers;

- a description of the current and proposed development

- an identification and comparison of various development alternatives

- project aspects which will require additional study

- preliminary engineering, economic, and financial feasibility assessments

- the permits needed to carry out the project

- the availability of water for the proposed development

- possible sources of funding

- probable significant environmental impacts which would result from project construction.

There are two primary incentives for local groups to enlist TAP's aid in evaluating a water project. The first is cost. The prefeasibility study conducted by TAP is performed free of charge. Thus, use of this service does not require the local group to incur any financial liability in exploring an alternative or series of alternatives to a given problem.

The lack of bureaucratic "red tape" is undoubtedly another major attraction for potential clients. TAP is a relatively small program operated only by an engineer and an economist. It is also fairly autonomous in that it does not rely extensively on other branches of the DNRC or other agencies to evaluate assistance applications or carry out the prefeasibility study. These factors, combined with the small number of assistance requests received by TAP allow a much more rapid processing of applications than would occur through a similar techncial assistance program at the federal level. Thus, assistance in the

preliminary phase of a project tends to be more immediately available from TAP than through federal assistance programs.

Program Procedure

Interested local groups may contact the DNRC and request that a prefeasibility report be prepared for a particular project. Through a joint effort with the requesting group, TAP staff then conduct a field review of the proposed project. At this time the amount of local interest in the project is assessed and anticipated problems with the project are identified and evaluated. The field review serves as a preliminary screening session to eliminate from consideration blatantly unsound project proposals. This may be especially important when local groups want to solve a perceived problem but come to TAP with only a very rough idea of how to do so.

One of three conclusions may be reached as a result of the field review:

1. Both TAP staff and the requesting local group may agree that the proposed project appears to have some potential for development. Preparations are continued to conduct studies which will result in the publication of a formal prefeasibility report. Five TAP projects have been accepted for further study on these grounds.

2. Both TAP staff and the requesting local group may recognize that the proposed project does not warrant a full prefeasibility investigation because of insurmountable technical, legal, or financial problems. TAP staff conduct an abbreviated preliminary survey and analysis. A short, informal written statement is then provided which outlines the problem(s). No formal TAP study is carried out and the project is dropped from further consideration. Two of the eight potential TAP projects have been eliminated at this early stage.

3. TAP staff may feel that the proposed project is infeasible, while the sponsoring group might continue to support further investigation. Again a prefeasibility study will be conducted and a final TAP report written. Only 1 of the 8 potential TAP projects has been accepted under this circumstance. In this particular case, the study provided a formal, objective confirmation of the proposed project's infeasibility and thereby effectively de-fused much of the popular support behind it.

Generally, requests are fulfilled on a first-come, first-served basis. When two or more potential projects are being simultaneously considered for a prefeasibility study, the TAP staff confers with supervisory personnel in the Engineering Bureau to set final priorities on the requests. Some projects may warrant faster action than other regardless of the date on which the request for assistance was received. During the 1978-79 biennium, for example, two local groups requesting a TAP prefeasibility study for their respective projects were also interested in applying for financial assistance through the DNRC's Renewable Resource Development Program (RRD). Consequently, these projects were given highest priority so they could meet the application deadline for RRD.

Although there exists the opportunity to draw upon the experitse of the entire Water Resources Division, TAP relies most heavily on efforts of the Program engineer and an economist. Field surveys, preliminary designs, cost estimtes, environmental impacts and report preparation are the responsibility of the engineer. Preparation and collecting of economic data on the project, financial and budget analysis, and assistance in preparation of the final report are usually the responsibility of the Department economist.

Historically, field work has been completed and a final TAP report written anywhere from 1-5 months after the study was initiated. The final period will vary depending on a number of factors including the availability and accuracy of existing data, the cooperation of the involved parties and the extent to which TAP staff are involved in other Department programs at the time.

The completed prefeasibility study provides adequate grounds on which to decide whether the proposed project should be pursued. Formal involvement of TAP staff is terminated after the final report is issued and discussed. It is the responsibility of the local group to follow through on the project based on TAP recommendations.

Until recently, little effort was made to publicize the existence of TAP. Even with this lack of promotional effort, enough study requests were received to occupy Program staff nearly full-time. Recently, however, a virtual cessation of incoming requests underlined the need for more extensive advertising of the Program. As a result numerous city and county organizations were informed of TAP through the widely-circulated Department of Comunity Affairs newsletter. A number of study requests have since been received and further advertisement of the program is expected to increase awareness and use of the services provided by TAP. This will be particularly true should the demand for small water projects increase as anticipated.

DESCRIPTION OF PAST TAP PROJECTS

Technical Assistance Program staff have been involved in eight project proposals since the intiation of the program in 1976. As of May, 1980,

prefeasibility reports on 6 project proposals had been completed. Final TAP reports have been prepared for a trout processing facility, a rural water supply system, 3 irrigation storage projects, and a gravity sprinkler irrigation system. Of these 6, only 1 (the trout procesing facility) will be completed as planned. The following is a more detailed description of each study and its outcome. The reports are listed chronolgoically in the order they were completed.

Rural Domestic Water system in the Big Coulee Area

In June, 1976, the DNRC was contacted concerning a domestic water supply problem in the Big Coulee area south of Ryegate, Montana. Residents of the area were forced to haul water for human consumption. The geologic formation near the residences was such that good quality water was very expensive, if not impossible, to obtain by drilling. Through TAP, a prefeasibility study was conducted for a rural domestic water supply system in the Big Coulee area. Four alternatives were examined as a solution to the water supply problem;

1. Maintain the present method of hauling to obtain water.

2. Develop a well just outside the Big Coulee region and construct a distribution line to deliver the water.

3. Develop the well above and deliver the water with a tank truck.

4. Purchase a tank truck to deliver water from Ryegate.

Costs for each of the four alternatives were determined and a financial analysis conducted. Alternatives 3 and 4 were considered economically infeasible. Although Alternaive 1 was least costly, Alternative 2 was suggested as a possibility of the Big Coulee residents could secure an FHA grant to help defray the costs of construction. A grant request based on TAP study results was submitted to FHA after the report was completed. However, the grant was refused because of the small number of people in the service area willing to pay for the remainder of the water supply project.

Western Montana Trout Growers - Commercial Fish Processing Cooperative

The slow growth of the comercial trout raising industry in Western Montana has been attributed to the absence of a sizable fish processor in the region. In December, 1976, the Western Montana Trout Growers Association was formed to promote construction of a commercial fish processing facility near the Jocko River. The DNRC's Technical Assistance Program was contacted to perform a prefeasibility analysis and to assist in securing a Small Business Administration Loan for the project. Physical dimensions of the proposed facility were planned, a suggested mode of operation detailed, and plant production capacity estimated. Budgets were then outlined for the first 3 years of operation to determine the economic feasibility of the plant. Net income was estimated at - $2,100 for the first year followed by + $31,985 and + $47,640 for the second and third years respectively. The Association has since secured the necessary loans and the project has been constructed.

The Madison Conservation Project - Dry Lake Project

The Madison Conservation District contacted the DNRC in October, 1977, to request assistance in assessing a proposed project involving 1) an enlargement of the Dry Lake Reservoir near Pony, Montana and 2) construction of a water distribution system. The purpose of the project was to capture greater amounts of spring runoff so that irrigated alfalfa and barley acreages could be expanded. The Conservation District was also interested in applying for financial assistance through the DNRC's Renewable Resource Development (RRD) Program. Direct and indirect costs were compared to the user's ability to pay as determined by a farm budget analysis. Since projected costs exceeded the calculated ability to pay ($56.99/acre of cropland/year to $31.14/acre of cropland/year) the TAP report declared the proposed Dry Lake Project economically infeasible. On the basis of the TAP study results the Madison Conservation District's request for RRD funding during fiscal year 1980-81 was turned down.

Glen Lake Irrigation District - Gravity Irrigation System

In February, 1978, the Glen Lake Irrigation District (GLID), located near Eureka, Montana, contacted the DNRC to request assistance in evaluating a proposed gravity pipe irrigation project. This irrigation system would be used to replace an existing canal distribution network. Records showed that the GLID was losing over 30% of its appropriated water because of leakage in the canals. It was noted that there would definitely be a market for the additional water if the loses could be stopped or minimized. Energy costs associated with pumpage would also be saved if the gravity feed system were developed. To mitigate the financial burden of such an undertaking, GLID applied for a Renewable Resource Development grant through the DNRC. However,

the TAP study showed that costs for the proposed project significantly exceeded the users ability to pay ($65.00/acre/year to $24.43/acre/year). The gravity pipe irrigation system was declared financially infeasible and plans for it were dropped. It was recommended that the district pursue funding to repair one of the major siphons in the irrigation network suffering from leakage problems. The District then re-submitted an RRD application for financial assistance to replace some of the leaking siphons in the existing irrigation network. An RRD grant was approved and replacement efforts are underway.

Teton Cooperative Canal Company - Eureka Reservoir Project

The Teton Cooperative Canal Company contacted the DNRC in January, 1977 for assistance in determining the practicality of rebuilding or replacing the irrigation canal system extending from Eureka Reservoir. Part of the system was experiencing high seepage losses when filled to capacity. Three possible alternatives were considered;

1. Rebuilding the existing canal and lining it with concrete.

2. Constructing a reinforced concrete buried pipe to serve as an alternate outlet at the east end of the reservoir.

3. Constructing an alternate unlined canal outlet at the east end of the reservoir.

Units costs associated with each alternative were derived from business estimates or adjusted from previous project bids. A farm budget analysis was used to determine the user's ability to pay for the project. Although the prefeasibility study indicated Alternative 3 was financially feasible, it was recognized that there were numerous costs which were identified but not quantified in the report. Detailed studies were recommended to more firmly establish economic feasibility. Potential sources of funding were also described. Since the completion of the study, the TCCC has dropped the proposal because of land aquisition complications and is now repairing the present ditch.

Musselshell River Water Development Association - Off-Stream Storage Reservoir

In May, 1977, DNRC received a request for technical assistance from the Musselshell River Water Development Association (MRWDA). The Association was interested in evaluating two potential sites for development of an off-stream irrigation water storage project. Water from the reservoir would be used to increase alfalfa, corn, and small grain production in the area. Several other evaluations had indicated that reservoir construction was economically unjustifiable at either site. MRWDA was interested in a more detailed assessment, however. The TAP study compared the two sites in terms of requirements for dams, pumps, discharge lines, and diversion structures. Annual costs per acre-foot of water were developed for both the Willow Creek site ($43.55/acre-ft/yr.) and Womans Pocket ($46.90/acre-ft/yr.) This was compared with the users ability to pay of $8.50/acre-ft/yr. as determined through a farm budget analysis. On the basis of his analysis, neither site was

acceptable. No attempt has been made to continue study on the project proposal.

In summary, TAP reports have been requested for eight potential projects. Two of the potential projects were eliminated from consideration at the field review stage. Prefeasibility reports were prepared for the remaining six as described previously. Only 1 report was actually associated with the construction of a proposed project. This was the trout processing facility. The remaining 5 proposals all addressed other legitimate water development needs, such as water storage and/or distribution for irrigation and domestic water supply. No new water projects were constructed from this group. However, efforts to repair/improve existing projects were pursued in two instances after a TAP study evaluating alternative courses of action had been completed. Virtually all of the TAP reports published thus far have dealt with evaluations of small, single-purpose water development proposals which would provide benefits to a very localized area.

The prevailing function of the Technical Assistance Program has been to assist local groups in evaluating their proposals. The nature of TAP projects thus far has been such that analysis has provided valid grounds to drop proposals for new water projects. The usual outcome of a TAP study has been to identify economically unsound water project proposals, offer evidence for this assessment and thereby prevent local commitment of financial resources to these projects. Thus, the primary impact of TAP on water management/development in Montana is that it has served to discourage the implementation of unsound water project proposals.

A major feature of the Techncial Assistance Program is that it specifically addresses a given project on an objective basis and provides a logical justification for the resulting assessment. This gives TAP study results a high degree of credibility with local sponsors, consequently, recommendations made to the requesting group are generally followed. TAP's failure to endorse a proposal after study completion has effectively terminated consideration of that proposal at the local level.

Where TAP indicates further consideration of a proposal is justified the report provides a level of detail sufficient to pursue most types of financial assistance. Both the Renewable Resources Development Program at the state level and the Farmers Home Administration (FHA) at the federal level have received and evaluated financial applications based on TAP studies. Thus, in addition to the information they provide to the requesting local group, TAP reports also allow state and federal agencies to determine whether they will support a given project with financial aid.

Briefly summarizing, TAP has resulted in very few new water projects which improve the utilization or conservation of Montana's water resources. This effect stems from its apparent tendency to attract for its services water project proposals which are unable to generate sufficient revenue to cover their costs. Whether the ratio of successful to unsuccessful new water projects is important in justifying the program will not and cannot be determined in this paper. Clearly,though, TAP's strengths are: it provides a logical rationale for dropping unsound water devlopment early in the planning stage and at no cost to the sponsor; it has established generally good

credibility at the local level; and it complements those agencies which evaluate financial aid requests for small water projects.

ALTERNATIVES FOR TECHNICAL ASSISTANCE

In evaluating the DNRC's Technical Assistance Program, it is desirable to examine other potential sources of technical aid similar to that provided by TAP. An examination of alternative assistance programs should reveal whether TAP's involvement is of only secondary importance in serving the needs of small water interests in Montana.

Federal Technical Assistance Programs

The Soil Conservation Service is the Federal agency most directly involved in providing technical assistance to sponsors of small water projects. The SCS conducts three programs through which this aid is available.

The Small Watershed Program offers both technical and financial assistance to local organizations in evaluating, planning, and carrying out water projects. Eligible projects include those for flood control, agricultural water management, development of recreational areas, industrial and municipal water supply development, and fish and wildlife habitat improvement. Project sponsors may contact the SCS and obtain an application for assistance. The application is evaluated and,if approved, SCS personnel make preliminary investigations, during which project feasibility is assessed. Preliminary feasibility assessments are published as Watershed Investigation Reports. If the sponsoring organization is interested in pursuing a given project, SCS will continue to provide assistance in the planning, design, and construction phases.

There are four primary drawbacks which may discourage use of this program by the types of local groups with which TAP deals. First, the Small Watershed Program deals with projects on a watershed basis. In many cases, over 80% of the landowners in the watershed must sign a cooperative agreement before a project can receive aid through the Program. Thus, the Small Watershed Program is aimed at projects having watershed-wide implications. Second, the time needed to approve an application for admission into the Small Watershed Program is often considerable. The bureaucratic "gauntlet" includes reviews by an

official in the designated state clearinghouse, personnel at the SCS state office, the SCS state conservationist and, finally the SCS Administrator in Washington D.C. Sponsors of a small water project are less likely to accept this inconvenience than are sponsors for larger projects whose need for sizeable amounts of financial technical assistance may limit their alternatives. Third, staff limitations at the federal level dictate that approved requests for assistance be strictly prioritized. Those proposed projects which would generate benefits for the largest number of people are given first priority. Thus, the large, multi-purpose project is much more apt to receive technical aid than is a smaller, single-purpose project. Finally, projects aimed at the treatment of a resource problem such as excessive gully or cropland erosion usually receive a higher priority than projects aimed at water development.

The Resource Conservation and Development Program (RC&D) is also a possible source of assistance for a wide variety of water-related projects. However, the principal objective of RC&D is to speed up resource programs in multiple-county areas as a base for economic development and environmental protection. RC&D projects may be created to develop water reosurces for agricultural, municipal, or industrial use and for recreation and wildlife. But the very localized benefits which would accrue from a small water project does not justify the large amount of effort required to form such a multi-county district expressly for the purpose of receiving RC&D technical assistance. Should a proposed water project be located within an active RC&D district and the development of the project be consistent with the goals of that district then RC&D assistance could reasonably be pursued.

As with the Small Watershed Program, the procedure for application review and approval is quite lengthy. In addition, a plan which identifies development needs for the entire district must be submitted and approved in order for any single project within the district to receive assistance through RC&D. For the most part, the Resource Conservation and Development Program is not suited to providing local groups with techncial assistance in evaluating small, single-purpose water projects.

The Soil Conservation Service, in cooperation with soil and water conservation districts, provides technical assistance to individuals or local landowner groups in assessing the need and feasibility of many types of water related projects. The Federally-funded Conservation Operations Program provides the financial support for these activities. Due to staff limitations, however, strict priorities are often set by the conservation districts for projects within their jurisdiction. As in the Small Watershed Program, proposed projects which will address the treatment of a resource conservation problem are much more likely to receive a high priority than water supply - water development projects.

State Technical Assistance Programs

There are virtually no other state programs which compare with TAP in providing technical assistance to small water projects. Many of the state programs which are of value in assisting water development efforts are concerned primarily with making financial aid available to mitigate the costs of design and construction. A case in point is the DNRC's Renewable Resource Development Program. For the most part, these programs assume that adequate

preliminary assessments/evaluations have been conducted before a proposal is submitted for aid consideration.

Consulting Firms

A limited number of consulting firms have the expertise and resources to deal adequately with a variety of water development projects. Usually, a wide range of project sizes and types will be accepted for study by these firms. Because of the lack of bureaucratic constraints and the freedom to hire the personnel necessary to complete the task, a consulting firm will usually require only a relatively short period of time to complete a prefeasibility study. This time period may be as short as a few weeks under urgent circumstances.

There are two principle drawbacks involved in contracting a consulting firm to assess the preliminary feasibility of a water project. The first is cost. Representative charges for contractual services range from $20-100/hr. Sponsors of small, rurual water projects often cannot commit or are not willing to commit, the resources required to finance a preliminary study with such uncertain results. Second, firms willing to conduct a preliminary assessment of a water project would generally harbor much interest in continuing their involvement should further need arise. This includes carrying out feasibility studies as well as assuming responsibilities for project design and construction. A favorable prefeasibility assessment would undoubtedly create more business opportunities for the particular firm. Such a situation is not apt to encourage an objective assessment of a marginal project proposal.

Others

The Old West Rural Water Office, funded by the Old West Regional Commission, aids the developmentof rural and small community water systems in a five-state area including Montana. Specifically, it is aimed at providing assistance to communities and rural areas faced with water quality, quantity, and distribution problems and who are interested in the potential benefits of improving or developing a central water system. The TAP engineer is a member of the Board of Directors of the Old West Rural Water Office. Among the services provided by the Office are preliminary project assessment and economic feasibility as well as advise on potential funding sources. Thus, the Old West Rural Water Office provides services very similar to those offered by TAP for small domestic water supply systems. At present, all TAP study requests for such projects are referred to the office. Although funding for the Old West Rural Water Office program will extend through 1983, it is unlikely that the program will be continued after that time.

SUMMARY

The following is an identification and brief description of the major issues surrounding the present DNRC Technical Assistance Program for Water Projects.

1) The primary purpose of TAP is to assist local groups in evaluating proposals for small water projects. However, TAP is a politically popular program because it has so far emphasized water development on a small scale and for the benefit of the affected local populations. Although financial aid is not available through the Program, its services are offered free of charge.

2) Under present Program guidelines, an extremely wide variety of water development and management projects are eligible to receive assistance thorugh

TAP. There are virtually no guidelines for prioritizing assistance requests. This may become critical if the demand for TAP's services exceeds the ability of the staff to provide these services. There is every indication that this situation is developing now, as 5 requests for technical assistance have been received by the Program since January, 1980, and at least 3 more applications are expected soon.

3) It appears that a program to provide low-cost, preliminary evaluations of locally-sponsored, small-scale water project proposals satisfies an otherwise unmet need in the existing technical assistance framework.

Federal agencies geared to provide technical assistance in water-related projects frequently adjust priorities so that those projects generating benefits to the greatest number of people are emphasized. This works against the small water project. In addition, rectification of resource management problems are often given priority over water development concerns. Finally, the large investment of time and effort needed to attain eligibility for assistance through a Federal program presents a significant obstacle to small water-development interests.

For many local groups, the substantial fees charged by private consulting firms preclude this source as a viable alternative for technical assistance for preliminary engineering work. In addition, the profit incentive for private firms and their willingness to become involved in other aspects of project development may affect their desire to objectively evaluate the more marginal proposals.

4) The impacts of TAP are the changes produced by the increase in water projects intitiated under the Program. To date, only one of the TAP reports has resulted in the initiation of a substantial water-related project. Thus, TAP has so far had a negligible effect in encouraging new water projects in Montana. There may be two related factors which contribute to this.

a) TAP was started in 1976. The possibility exists that the program has not been around long enough to establish itself as a creditable source of technical assistance to the broad spectrum of small water project interests in Montana.

b) Until recently, little effort was directed at publicizing the Program. Local groups in need of assistance for developing workable water projects to satisfy legitimate needs may simply have been unaware of services provided by TAP.

5) TAP has been most effective in identifying and terminating proposals for the development of unsound water projects. Its performance in this capacity should certainly be regarded as important in providing for the best interests of the involved local group as well as the State of Montana.

OPTIONS FOR PROGRAM DIRECTION

1) Continue the present program as is. Two factors will significantly affect the demand for TAP. First, the degree to which the Program is publicized will be very important. Assistance provided free of charge has always been, and will likely continue to be, popular at the local level. If an

effort is made in this direction, it should be aimed at both the general public and those Federal and State agencies which deal with small water projects. SCS, for instance, often receives requests for technical assistance on small water projects that they will not handle. Some of the requests could be appropriately referred to TAP if SCS personnel were made aware of the Program. Secondly, the role of small water projects as a means of satisfying future increases in water demand will also affect the demand for TAP's services. The prediction that small water development projects in Montana will become increasingly important as a means of satisfying future water demands has been made by a number of SCS administrators.

If the demand for TAP's services increases substantially, an increase in TAP staff may be necessary if this demand is to be met. In addition it may be helpful to set up a logical set of policy guidelines to be used in prioritizing requests for assistance through TAP, even if these guidelines are shifted periodically to emphasize different aspects of water developmentand management.

2) Narrow the focus of TAP to emphasize specific types of water development projects.

A number of water development and water management concerns are addressed by existing technical assistance programs in other branches of government. For example:

- Requests for assistance in evaluating water storage and supply systems for rural and small communities should continue to be referred to the

Old West Rural Water Office. TAP could re-assume this responsibility when the Rural Water Office Program is dropped in 1983.

- Technical assistance requests for the evaluation of projects aimed at controlling localized sediment and erosion problems are generally given a high priority in the Federally-funded Conservation Operations Program. Individuals requesting such assistance through TAP might be referred to the appropriate conservation district or SCS office.

- The SCS's Small Watershed Program is designed to deal with flood control, among other problems, in watersheds less than 250,000 acres. Since an effective flood control project generally requires a coordinated approach on a watershed basis, requests of this type might be forwarded to the state administrator for the Small Watershed Program.

With the multitude of existing assistance programs, TAP might also function in an organizational - coordinative role between the above agencies and interested project sponsors.

It appears that a continued assistance program for projects associated with storage and distribution of water for irrigation is extremely desirable. Again, even if the types of water projects with which TAP will deal is more narrowly defined, a set of temporary guidelines to be used in prioritizing requests may still be desirable.

3) Drop TAP completely. Since TAP is not required by either state or Federal law, there would be no adverse legal consequences in dropping the

Program. It is also doubtful that the DNRC would lose claim to the funds currently used to finance TAP. Presumably, these funds would be used for the support of other Water Resources Division activities. At present, the major justification for retaining the Technical Assistance Program is that is appears to fulfill an otherwise unmet need in assisting local sponsors of small water development projects.

4) Require the users of services provided by TAP to pay a percentage of the cost to conduct the prefeasibility study. This would defray some of the costs of administering the Program. Additional incoming money could be used to enlarge the TAP staff.

5. Use existing or additional staff persons to actively search for local groups with good project proposals and with a need for technical assistance. Thus, the staff would actually work on recruiting acceptable clientele instead of waiting for potential clientele to pursue technical assistance through the program.